



US 20180052540A1

(19) **United States**

(12) **Patent Application Publication**
Myers et al.

(10) **Pub. No.: US 2018/0052540 A1**

(43) **Pub. Date: Feb. 22, 2018**

(54) **ELECTRONIC DEVICES WITH SIDEWALL
DISPLAYS**

H04M 1/02 (2006.01)

G06F 1/16 (2006.01)

H04M 1/23 (2006.01)

(71) Applicant: **Apple Inc.**, Cupertino, CA (US)

(52) **U.S. Cl.**

(72) Inventors: **Scott A. Myers**, San Francisco, CA
(US); **Stephen Brian Lynch**, Portola
Valley, CA (US); **Anthony S.
Montevirgen**, San Francisco, CA (US)

CPC *G06F 3/041* (2013.01); *G06F 3/0412*
(2013.01); *G06F 3/044* (2013.01); *G06F*
3/04817 (2013.01); *G06F 3/0488* (2013.01);
G06F 3/04886 (2013.01); *G06F 2203/04102*
(2013.01); *G06F 1/1652* (2013.01); *G06F*
2203/04112 (2013.01); *H04M 1/0283*
(2013.01); *H04M 1/236* (2013.01); *H04M*
2250/16 (2013.01); *H04M 2250/22* (2013.01);
H04M 1/0268 (2013.01)

(21) Appl. No.: **15/783,272**

(22) Filed: **Oct. 13, 2017**

Related U.S. Application Data

(63) Continuation of application No. 14/692,365, filed on
Apr. 21, 2015, now Pat. No. 9,411,451, which is a
continuation of application No. 14/602,199, filed on
Jan. 21, 2015, now Pat. No. 9,791,949, which is a
continuation of application No. 14/273,315, filed on
May 8, 2014, now Pat. No. 8,976,141, which is a
continuation of application No. 13/246,510, filed on
Sep. 27, 2011, now Pat. No. 8,723,824.

Publication Classification

(51) **Int. Cl.**

G06F 3/041 (2006.01)

G06F 3/044 (2006.01)

G06F 3/0481 (2013.01)

G06F 3/0488 (2013.01)

(57)

ABSTRACT

Electronic devices may be provided that contain flexible displays that are bent to form displays on multiple surfaces of the devices. Bent flexible displays may be bent to form front side displays and edge displays. Edge displays may be separated from front side displays or from other edge displays using patterned housing members, printed or painted masks, or by selectively activating and inactivating display pixels associated with the flexible display. Edge displays may alternately function as virtual buttons, virtual switches, or informational displays that are supplemental to front side displays. Virtual buttons may include transparent button members, lenses, haptic feedback components, audio feedback components, or other components for providing feedback to a user when virtual buttons are activated.

